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ABSTRACT

An analysis of pronouns in Proto-Algic, the ancestor of Proto-Algonquian and other languages, revealed that the Proto-Algic demonstrative roots and locatives had three inflectional endings, referring to spatial or temporal distributions of entities, which evolve into the gender systems of Yurok and Algonquian. Proto-Algic had two discourse pronouns. One was semantically associated with past time, and the other developed into Algonquian future markers. The Algonquian verbs of "being (somewhere)" also all come from among these deictics. Proto-Algic also had a relative pronoun, instrumental in the development of some types of changed conjunct, and an associative deictic that produced a marker of obviation. A 64-item bibliography is included. (MSE)

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PROTO-ALGIC III: Pronouns

Paul Proulx

Abstract: The Proto-Algic demonstrative roots (*w-, *y-) and locatives (*m-, *n-) had 3 inflectional endings, referring to spacial or temporal distributions of entities, and which evolve into the gender systems of Yurok and Algonquian. It had two discourse pronouns: *k- 'previously mentioned', and *t- 'known but not previously mentioned'. *k- is semantically associated with past time; *t- develops into Algonquian future markers. The Algonquian verbs of 'being (somewhere)' also all come from among these deictics. Proto-Algic also had a relative pronoun (*?-), instrumental in the development of some types of changed conjunct, and an associative deictic (*er- 'like another'), which produces a marker of obviation.

0. Introduction

In the previous papers of this series (Proulx 1984a, 1985), which include the reconstructions numbered 1-238, I sketched the phonology and the verbal morphology of Proto-Algic - the ancestor of Proto-Algonquian, Wiyot, and Yurok - demonstrating the simultaneous reconstruction of features of protolanguages of the first and second order as interdependent variables. These papers, despite the methodological innovation involved, illustrated only well known theory about the structure and evolution of language. The present paper, however, is on a topic where our theoretical knowledge about the way languages evolve is growing rapidly - and it thus comes to confirm and elaborate recent theoretical insights.

Traditionally, the focus of Comparative Algonquian (and Algic) linguistics has been phonology, nouns, and especially verbs - and indeed much remains to be done in these areas. Nonetheless, attention of Algonquianists is now increasingly being turned to syntax and discourse analysis - and hence to the study of particles. However, particles are hard to study, especially from a diachronic perspective. Algonquian languages differ widely in their inventory of them, so that standard comparative reconstruction is seldom possible. One senses, at most, structural parallels. Evidently, Algonquian particles are historically unstable.

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Luckily, this very unstability of Algonquian particles suggests a way of studying them: by combining comparative with internal reconstruction, using diachronic universal tendencies as a guide. Such work not only enriches our knowledge of Algonquian and Algic prehistory, it contributes to our growing understanding of the universals involved.

This paper did not begin as a study of particles, but of pronouns. As some of the demonstratives were reconstructed, it began to be apparent that in some of the languages there were particles that greatly resembled them in form. In other cases, one language had a particle which seemed to be a good match for a demonstrative in another. The literature on universals readily explained these similarities in a general way: in many languages of the world demonstrative pronouns are a source for a variety of cliticized particles (see Greenberg 1978). But the history of Algic is a long one involving many languages: there has been time for a great deal of evolution. In its course we see a variety of universal tendencies interacting together in complex ways - and some developments not previously reported as diachronic universal tendencies at all (though consistent with them).

In addition to its implications for linguistic universals, this paper proposes a hypothetical partial account of how animacy gender may have arisen in Algic (from MOTILE/ STATIC categories), and of how initial change could have originated. If these accounts are indeed correct, and if they reflect universals rather than random historical developments, further work on universals may yet come to buttress them.

Besides the prior members of this series, this work rests upon my reconstruction of the demonstrative pronouns of Proto-Algonquian (Proulx 1988), and two other papers. The first (mentioned above) is a study of the universal diachronic tendencies of demonstratives by Greenberg (1978) - where he documents their frequent evolution into discourse pronouns, articles, and ultimately affixes marking such categories as gender and number or simple nominality.

The second is a detailed analysis of Cheyenne deixis by Leman (1984) - where he utilizes his long and intimate acquaintance with this language to trace the subtle semantic links among several of its morphological subsystems: demonstratives, discourse pronouns, locatives, markers of anaphora and cataphora, relative roots and preverbs, and the future tense.

Despite the attention necessarily given to deixis and universal tendencies in the present paper, however, it remains chiefly a reconstruction of the pronouns of Proto-Algic. An

attempt is therefore made at a full reconstruction, even though there are problems with some sets. The reconstruction of personal and interrogative pronouns (secs. 8 and 9) is particularly complex and uncertain, and some readers may prefer to skip these sections. There is no reason why they cannot do so. Somewhat better, but still based on weak evidence, are secs. 2 and 11 (respectively discourse pronouns and inflection). Again, the rest of the paper stands without them, except for part of sec.6 (temporals), which makes reference to the discourse pronouns.

1. Demonstrative Pronouns and Locatives

Demonstrative and locative pronouns are closely related synchronically in the Algonquian languages, with distal inanimate singular demonstratives often serving as spacial locatives and animate singulars as temporal ones. This close association between the two dates back to Proto-Algic, with individual pronouns moving from one set to the other in individual languages. The reconstructible demonstrative stems are:[1]

(239) *wo 'this (restricted)': PA *o: (sg. for both genders), Wiyot wu 'this'.

(240) *wa 'this (personal, extended)': PA *wa 'this (animate sg.)', PA *wa:- [in *wa:-ka: 'this (absentative animate sg.)'], Y wo- [in wok and wo? 'this (personal)']. Cf. W wa 'still [at this time]'.

(241) *we 'this (nonpersonal, extended)': PA *we:- [in *we:ka: 'this (absentative inanimate sg.)'], Y we- [in wek and we? 'this (nonpersonal)'].

(242) *yo 'that (restricted)': PA *yo: 'that (both genders), there', Y yu? 'there'.

(243) *ya 'that (personal, extended), then': PA *aya 'that (animate sg.)', PA *ya:- 'that yonder (animate sg.)' [and *ya:- in *ya:ka: 'that (absentative animate sg.)'], Y yo- [in yok and yo? 'that (personal), he or she, there']; W ya and yak 'then (after doing various other things)', and Ps yakà 'then (future)'. See Proulx (1988:sec.2.2) for prothetic PA *a. Future fieldwork should attempt to distinguish Y yo? and yu? 'there' semantically.

The reconstructible locative stems are:

(244) *ma 'proximal time': PA *ma 'this (animate sg.)', Y mo 'when'.

(245) *na 'distal time': PA *na 'that (animate)', PA *na 'then' (uD ná), PA *na: 'that (animate, absentative)', Y no?oɬ and no:ɬ 'then' [with locative -Vɬ].

(246) *ni 'distal space': PA *ni 'there (nonremote), that (inanimate sg.)', Y ni 'locative' (ni yo? 'here, there', see Robins 1958:103, 145).

These reconstructions assume that the length contrast in final vowels of monosyllables is secondary in Proto-Algonquian (at least in pronouns).

1.1. Vowel Length in Algonquian Monosyllables. In some of the Algonquian languages, the reflexes of vowels in monosyllabic words often differ from their reflexes in longer words. For example, although PA *e: generally gives Mc e [as in Mc wen 'who?' from *(a)we:n- A219], it gives Mc e: in e:t 'that's what she says' from the participle conjunct of PA *ewa 'she says so' A405 [cf. M ⟨:c 'what she says']. Better known are the atonic words of Menominee, whose vowels are often short where a long one would be expected etymologically.

Along the same lines, it now appears that the length of final vowels in syntactically independent monosyllabic Proto-Algic words is noncontrastive: the phonetic length of such vowels was determined chiefly by the presence or absence of stress. Generally, their reflexes coincide with those of short vowels in Algonquian, and with those of long vowels in Wiyot and Yurok (see #240, 241, 243-246 above), except where some atonic by-forms have been preserved as enclitics (see #251, 253 below).

However, it seems likely that in Algonquian final vowels of [stressed] demonstratives were further lengthened to indicate great distance (as is still done among the Kickapoo and Micmac). A lengthened vowel is a natural iconic representation for length of time, and for a great distance, and such representation is probably found in all languages. [It's done with the vowel of English far, for example.]

In Algonquian, this practice gave rise to a contrast of length in the final inflectional vowels of demonstratives, the longer vowels marking a REMOTE category of inflection. This category then evolved into the INACCESSIBLE [=ABSENTATIVE] (see #240, 241, 243). Similarly, the contrast in locatives specifying time gave rise to a DURATIVE category, also marked by the longer vowel (see #244, 245).

The shift of Proto-Algic *i to PA *e in first syllables, well established in longer words, does not on available evidence take place when that *i is word final. Thus, for example, we will

reconstruct PA *ĉi 'hypothetical future' (see sec.6 below).

In contrast to pronouns and other syntactically independent words, PA preverbs (and no doubt prenouns) of the shape CV generally have the reflexes expected in word medial position. However, like their syntactically independent counterparts, these microwords are also exempt from the lowering of Proto-Algic *i. Instead, this vowel is lengthened in accord with the regular complementary distribution of Pre-PA *i: and *i (i.e., the former in the first syllable of a microword, the latter elsewhere). See #247-250 below.

The analysis of PA vowel length as secondary in Proto-Algic words of the shape CV requires revision of #43 and #44:

(247) *wi 'future of volition': PA *wi: (see #44), W wí.

(248) *kha, *khe 'future of obligation': PA *ka [changed *ke:] 'shall, ought to' (see #43), W khé 'might', Y ke in Y kesi 'future time with anaphoric reference to past event' (beside ?esi 'past time, with similar anaphoric reference to that of kesi', see Robins 1958:101).

Y ki 'can, must, will, ought to' is now seen to be unrelated in origin to this preceding item. Instead, it originates in an 'ability' preverb and its use to mark the future is secondary:

(249) *ki 'can, able to': PA *ki: [C ki:-], Y ki 'can, must, will, ought to', cf. PA *ki:š(i) [Ps kis(i)]. Examples are: swC mwac ki:-atoske:wak 'they can't work', ka-ki:-ni:min na 'are you (physically) able to dance?' (Voorhis 1984a:39-1), Ps 'kisihtun 'she can make it; she made it'.

(250) *ki 'previous action': PA *ki:(h) 'preverb: past' A878 [changed *ka:], W kił 'finished' [with ɬV 'already, finally' incorporated], cf. PA *ki:ši 'completed' A945. PA h may be secondary in this item, having spread from those positions where it is automatic by external sandhi. See also *ki:t- 'finish' (7). Examples are: swc ki:-ki:we:w 'she went home', W kił łép 'it's cooked' (Teeter 1964:85).

1.2. Gender. Proto-Algic had 3 degrees of animacy in its demonstrative pronouns: PERSONAL (with inflectional *-a), NONPERSONAL (with inflectional *-e), and INANIMATE (with inflectional *-i). It is possible that these degrees of animacy did not form a closed system of gender: rather, entities may have been assigned to a category partly on the basis of immutable characteristics and partly on the basis of transient evaluations (as in Yidiny, see Comrie 1981:189-190). There seems to be a continuation of such a state of affairs to some degree in Yurok,

where someone dead drunk may be classed as nonpersonal rather than personal (Robins 1980:361). [See #240, 241, 243 for the personal-nonpersonal contrast. The inanimate category is indirectly supported by #246, as well as its use in Algonquian.]

As the phonological evolution of Algonquian erases the length contrasts in closed vowels (see Proulx 1984:193), there remains no way to express the accessible-inaccessible contrast for inanimate referents (*-i and *-i: come into complementary distribution, with the latter in first syllables of words) - and nonpersonal *-e: is pressed into service for inaccessible inanimates.

This may have happened as follows. First, Algonquian nouns have come to be inflected for animacy (through concord with demonstratives), and most nouns - being longer than one syllable - have only *-i to mark the inanimate. Now suppose that fish and animals are considered nonpersonal while alive, but become inanimate when killed. There is inflectional machinery to distinguish, say, a living fish one sees (accessible *-e) from one hidden on the bottom (inaccessible *-e:) - but none to distinguish the dead fish that has been stolen (inaccessible) from the one that one is cleaning (accessible). Both would take *-i.

In the second case, if a speaker wishes to emphasize the loss (inaccessibility) of the fish more than its degree of animacy, it could be done by innovating the use of nonpersonal inaccessible *-e: here. Moreover, such situations would be quite common and would be likely to lead to syncretism in the inaccessible endings of the nonpersonal and inanimate categories in nouns, from whence it evidently spread to pronouns.

Perhaps this extended syncretism and leveling contributed to the eventual demise of the nonpersonal category in Algonquian. The main reason for its demise, however, is that personal gender evolves into animate in Algonquian (with inflectional *-a and inaccessible *-a:), absorbing much of the old nonpersonal [notably animals and some trees and personal possessions]. What then remains of the nonpersonal is put together with the inanimate. The PA system which emerges is thus:

*-o: 'restricted'

*-a 'animate', *-a: 'animate inaccessible.'

*-i 'inanimate' *-e: 'inanimate inaccessible'

Algonquian evidence suggests that *-o marked a restricted location, overriding gender distinctions (see Proulx 1988:secs.2.4, 3). Consistent with this, Yurok drops it, while

Wiyot - which eliminates the gender inflection along with gender - retains it. [Wiyot retains *-a and *-i in nongender uses.]

We shall take up other uses of these endings below (sec.11).

2. Discourse Deictics

Discourse pronouns are somewhat harder to reconstruct than demonstratives, and we must depend on analogy and an appeal to universal tendencies.

Greenberg (1978:61, 70, 73) has established a universal tendency for articles to develop out of 'discourse deictics' and ultimately demonstrative pronouns, and to in turn become markers of gender and/or nominal status as they become incorporated into nouns. He further states (ibid. p.73) that 'Subjects, as favorite topics, tend to be definite' - suggesting a possible rôle for former articles as topic markers. This gives the following evolutionary sequence:

DEMONSTRATIVE ---> DISCOURSE DEICTIC ---> article --->

[GENDER / NOMINALITY / SUBJECT / TOPIC MARKER]

Any of the end products [GENDER / NOMINALITY / SUBJECT / TOPIC MARKER] in a daughter language will here be taken as indirect evidence for a discourse pronoun in its protolanguage, provided at least one other daughter language provides direct evidence.[2] Clitics generally mark phrases, and may not have a particular grammatical association with the word which hosts them phonologically (see Klavans 1985:104-105). Hence, there is nothing unexpected about finding one now 'leaning to the left' (i.e., on the prior word), now to the right. Reconstructions are:

(251) *k- (usually restricted *ko, sometimes emphatic *ka) 'the one previously mentioned': PA *-ko (swC e:kote: 'there [at a place previously mentioned]' [Voorhis 1984a:37-4] - with prefixed C e: from *?e [see #257 below], and locative C -te:, e.g., o:te: 'hither, here'), W ku 'that', Y ku 'that, the' [used to modify a noun] and, as relative-interrogative, 'when'. W ka 'that (emphatic)' and kas 'then, at that time', Moose Cree ka:a: 'so that's it!'. Compare PA *ká [and *ké ?] 'enclitic #1' [Proulx 1988:323], Y -k, often postposed to Algic demonstratives.

Other examples of PA *-ko are: swC e:kosi na ki:-ite:w 'did she say that to her [i.e., 'speak thus to her']?' (Voorhis 1984a:45-3), swC e:kosi ka:-ki:-iši-nipahak 'that's how I killed

her' (ibid., p.T2-1); C e:wako and e:yako 'the selfsame (both genders)', e:kosi niki:s-a:cimon wiy e:yako 'Now I have finished telling this one' [Wolfart 1973:37], e:kwah ta:nihi e:h-miywa:siniyikih wiya:sah, e:kota pa:nahike:yiwah tawa:sima 'Then by the best stores of meat, there his children cleared away the snow.' [ibid., p.34], and absentative e:wakwa: 'there she is', e:wakwa: wa:wa:ske:siw 'there goes that elk' [ibid., pp.34-35].

The origin of the wa and ya in these longer forms (C e:wako, e:yako) is not known; perhaps it reflects the incorporation of old demonstratives ['this or that selfsame one'] between **?e and **ko. Such co-occurence of this pronoun with demonstratives is common, though currently the latter are postposed (see Wolfart 1973:37). [Generally speaking, demonstratives can freely precede as well as follow their heads in Cree (ibid., p.33), and it is well known in the history of other languages for demonstratives to be incorporated in one position (before or after) and subsequently optionally added in the other (Greenberg 1978:72, 76).]

The C ko of e:wako does not appear to reflect Pre-C *kwa and *kwi (and thus the stem is not e:wakw-, pace Wolfart 1973:37), since final *kwa and *kwi give C k, as in C amisk 'beaver' from *ameɬkwa A129, and C mistik 'stick' from *me?tekwi A1235. Hence the rarer absentative forms in kw (e.g., C e:wakwa:) are taken to be secondary, and may have developed as follows:

There are only three Cree pronouns with absentative endings (Wolfart 1973:34-35) and 'the pronouns of this type are not common in texts; only the ta:niwa: paradigm is fully exemplified in recently collected texts.' Specifically, he cites only singulars for e:wakw- and an animate singular o:ya: 'that no longer here' beside a full paradigm for ta:niw- 'where is...?'. Moreover, this last is derived from ta:n(i)- 'which?', suggesting that the w in ta:niw- 'where is...?' can be interpreted as part of the inflection.

Now, e:wak(o/w)- is closely associated with ta:ni(w)- not only paradigmatically, but syntactically as well: 'ta:ni is typically counterbalanced by the delimiting demonstrative e:wako' (ibid., page 34). [See the example above with these words boldfaced.] This being the case, it seems likely that the higher frequency pronoun should serve as analogical model for the rarer one: X is to ta:niwa: as e:wako is to ta:ni, yielding analogical e:wako+wa:. I know of no obstruent plus *ow plus vowel sequences in PA - unless the common contraction of the *wi of verb finals before inflectional *-w is old - and so it seems reasonable to suppose that *o dropped in this environment giving the attested forms.

*ko 'the one previously mentioned (restricted)' is not to be confused with *kwa, another discourse marker. This latter is evidently a conjunction rather than a pronoun in origin [and residual function]:

(252) *kwa, *kwe 'foreground': PA *kwa (C e:kwa 'and then', Moose Cree e:ko 'foreground') [James 1986], Y kwesi 'and then (background, subplot)' [Proulx 1980:n.27]. See #257 below for prefixed C e:- from *?e. Yurok incorporates the (distal) associative deictic (sec.3 below), which shifts the meaning to 'background'. Y kwesi is thus for action what obviation is for participants: a mark of 'otherness'.

The other pronominal discourse marker is:

(253) *t- (usually *ta or *ti) 'the one (known but not previously mentioned'): PA *ta 'nominalizing postclitic' (Proulx 1988:324), W ta 'the, some', čɬwa and či 'that's where, what, why, etc.'. Compare uD tá which topicalizes a preceding nominal, and Saulteaux taššš whose function is less clear. Perhaps B -óxt- 'the one in X location' belongs here too. The B -ó would make the form restricted, and B -x a locative ending. Compare also topicalizing Y tu? 'and then', used to begin a paragraph that moves the main action of a story forward (Proulx 1980:297 n.27), and what seems to be its emphatic counterpart to? (ibid. n.38). Finally, compare Y -t in nonpersonal wit 'this or that' [beside wek]. If C -te: '(t)hither' and C -ta '(t)here' is related, it suggests a locative origin for this discourse pronoun.

Examples are: Ab iodá 'this one (inanimate)' beside ió 'this (inanimate)', B spóxta and spóxtsi 'the one [animate, inanimate] above' (from root *ešp- 'high' A357), W wu tá-phi?s 'this thumb', khi?mɬk ta-ɬácik 'the whale tradition' [lit. 'whale the tradition']; uD máxkwta 'it was a bear' [máxkw 'bear'], Saulteaux ki:n taššš 'How about you?'; Y to? wi ?wenu:woyk? ?uka:mopek? 'Never have I seen such rough water!' [with emphatic wi]. Cree examples are: o:ta 'here', ta:nita 'where?', ta:nite: 'whither?'.

We have seen that the development of an article or quasi-article of this sort into a sign of nominality or topic is a natural one. Indeed, there is some sign of history repeating itself: the distal locative *na is probably the ultimate source for the Wiyot nominalizing particle na 'the one who ... a while ago' (Teeter 1964:66), and uD ná 'topic' (Goddard 1983:356-357). [See sec.6 for a discussion of why a distal locative would be likely to develop into a marker of past tense in Wiyot.]

Examples are: W na ɬɬ-bu-wiliɬ 'the one who was swimming before', uD náni ntɬnta-pe:há:ne:n 'that's where we waited for her' [with ní 'that (inanimate)'] and nána tɬli-wɬlí:to:n 'she is

the one that made it or them' [with nâ 'that (animate)']. Compare Mc telimkɨp na 'that's what I told her'.

3. Associative Deixis

Proto-Algonquian has a deictic root *eɨ- (and by-form *aɨ-) which in its COMPARATIVE FUNCTION indicates a similarity between the action or entity referred to, on the one hand, and some (verbal or nonverbal) antecedent on the other ['like this or that']. In this it contrasts with a discourse deictic, which signals that an entity is identical with its antecedent.

This root also functions as a TEMPORAL LOCATIVE and SPACIAL ADLOCATIVE, in which case its reference is distal rather than proximal ['then, thither'].

In the Algonquian literature, it is called a relative root, and it is most often glossed 'thus, so, thither' - less frequently 'that kind, (this or that) way, then, there'. It is commonly used (1) as an initial verbal root, (2) as a verbal root following *t- 'be' A2002, (3) as a preverb and prenoun (with terminal *-i), and (4) as a enclitic particle following interrogative and demonstrative pronouns (with terminal *-i).

Each PA usage has matchings in Wiyot and/or Yurok, matchings that call into question the initial and intervocalic Wiyot and Yurok reflexes of Proto-Algic *r as hitherto reconstructed (i.e., W r and Y r).

3.1. The Reflexes of Proto-Algic *r and *l. In order to fully reconstruct the associative deictic of Proto-Algic, it is necessary to abandon the idea that *l and *r are preserved unchanged before vowels in Wiyot and Yurok (other than by shifts in consonant grade). Instead, we must recognize the following correspondences:

PAc	PA	W	Y
*l	*l	l(r)	r(l)
*r	*š(ɨ-)	š(s)	s

By this account, Proto-Algic *r continues to give Pre-PA *š (with a regular secondary alternation of Pre-PA *š to *ɨ before morpheme boundaries),[3] but before vowels it also gives Wiyot š (or s - the two alternate synchronically), and Y s - the reflexes already identified in consonant clusters (see Proulx 1984a:195).

Before vowels, Proto-Algic *l continues to give PA *l and W l, but it gives Y r rather than l (see Proulx 1984a:195 for its reflexes in consonant clusters). The l/r alternations in the Ritwan Sprachbund are now seen to be secondary from *l alone.

This interpretation of the data is a superior one in that it not only provides for the associative deictic (as we shall see below), but as well for Y hasek? 'I think' beside medial PA *-e:l 'think' A255 [reconstructed with a final link vowel *e] - all the while continuing to provide for all previously recognized cognate sets. This item reconstructs as follows:

(254) *a:l-, *e:r-, deverbal medial *-e:l- 'think, feel': W haɬb-'feel so' (Teeter 1964:111), Y has- 'think', PA *-e:lem- 'by thought, think (TA final)'. PA and Wiyot add the concrete final *-Vm 'by feeling, thought, etc.' (Algic #181)]. The pattern in the initial vowel may originally have been like that of 'make, do': *a: (or *á) in initial position (*a:hk- or *áhk- #103, 157), and *e: (or *é) in the medial (*-éhk- #136, 157). If so, the Yurok initial is presumably analogical to the medial.

Examples: W kuc ká-bɨɬ laɬbɨɬ 'she did not feel good concerning that' (Teeter 1964:111), Y hasek? 'I think', NiO maazhendam 'she feels badly' and inendam 'she thinks so' (adding TI *-tam- 'by thought, thinking' (and assimilating the stem final *m to the following *t), Mc ansuwite:t'm 'she feels bad about it', ansuwite:l'mk 'she feels bad about her', tel'te:lemɨk 'she thinks about her' (DeBlois-Metallic 1984).[4]

This account of *r and *l does require a number of corrections in established reconstructions - mostly of *l for *r and the like - but this does not involve any loss of economy, simplicity, or persuasiveness. Corrections are:

Algic #3: Y wo:rew 'roe of one fish' is surely the cognate here, wo:lew 'roe of several fish' a secondary (augmentative) grade variant. Algic #55, 56, 70, 71, 72, 85, 115, 116, 124: no by-form with *r is required for Yurok. Algic #113: the first variant should be *welekwe:škwi, with *l rather than *r. Algic #148, 183: an *l variant is required for Y r. Algic #147, 176: Y l is secondary. Algic #173: Y r is regular from *l. Algic #223: we need *entel- beside *entar- 'be there' - or rather *tel- beside *tar- (see sec.10 below).

These are all very minor details, and on balance do not complicate our analysis. In addition, there is one cognate set for which a complex explanation can be avoided: Y wɨsɨh and PA *wi:lyi 'navel' are simply from *wareyi and infixed *wegeleyi (see Algic #110).

3.2. Associative Deixis in Proto-Algic. With this new analysis, we are in a position to reconstruct the associative deictic of Proto-Algic:

(255) *er-, *ar-, rarely *el- and *al- [generally with *-a or *-i] 'thither, thus, that way, like that, that sort': PA *eŝi-, PA *aŝi- (with loss of *i before a vowel and archaically before a stop [Bloomfield 1946:sec.17, 25], and mutation of *ŝ to *ł before a morpheme boundary unless *i(:) or *y follows); W łła- (in the preverb tłła- 'there, then, thus' - with *t 'be' [see sec.10 below]); Y son- [extended with perhaps the abstract final *-Vn (Algic #177), or perhaps with *n- as in the Wiyot demonstrative nouns wùd and kùd], so:n-, and so:(y)- [with obscure extensions and/or lengthening]. See (c-d) below for more variants. Its four main uses reconstruct as follows:

(a) As initial verbal root: PA *eŝi-, PA *aŝi-, Y son-, so:n-, and so:(y)-. Examples: PA *eła:piwa 'she looks thither or thus' A377, *eła:pame:wa 'she looks at her so' A375, *eła:nko:me:wa 'she has her as (that kind of) relative' A374, M ahpi:w 'she comes to a place' [initial *ał-]. Y soninepek? 'how I feel', kus sł:nłk?ws 'how hard or which way is the wind blowing?' (with vowel harmony), so:tok? 'I go so'.

(b) Following *t- 'be': PA *aŝi-, W łła- (in the preverb tłła-'there, then, thus'). Examples: PA *e:ntałesiyani 'where thou art active, where thou dwellest' A265 [*tał- 'there (relative root)' A2022, cf. *t- 'exist (root)' A2002]. W tłłé-takw 'she dwells there'. See Proulx 1985 nos. 221-224, and note that Wiyot requires a grade variant in *l be reconstructed for Proto-Algic [*tal- or *tel- beside *tar-].

(c) As an independent or preposed particle: PA *eŝi 'thus, thither' A337 (preverb and prenoun), mD li mpi:nk 'in the water' (mutation leveled out, O'Meara, p.c.), M ese:h 'that kind or sort', Y hesi 'toward' (e.g., hesi pur 'toward the north'); M as 'there, in place' (e.g., kan as oti:nan 'she isn't there, she isn't in'), RhO zhiw(i) 'there', zhonda 'here' [Ottawa], Y so 'to a place' (e.g., so rek?woy 'to Requoi'), and Y so: 'thus, so' (e.g., so: tenołke?y 'she is so stingy') and Y so:k 'that sort' [with obscure extensions and/or lengthening].[5] Compare postposed Y so 'in a particular direction' (e.g., pa?a:ł so 'into the water'.

(d) As a postposed particle or clitic: PA *-ŝi, Y -s, W -s. Examples: PA *ta:ni eŝi 'how?': K taani isi, Mi taniŝi, C ta:nisi, Ch -tóneše-. M yo:s 'here' (yo: 'this [inan.]); C o:misi 'this

way' [o:ma 'this (inan.)]; M w<:?se:h 'what sort?' [from *we:kw- 'what?' A2158 plus *eθi]. Compare Y yu?s 'thither' beside yu? 'there', Y kus 'WH- (e.g., where?, when?, how?)' beside ku 'that', and corresponding W kas 'at that time' (beside ka 'that').

Algonquian seems to have preserved the grade 2-3 (θ) form of this element in nearly all cases, replacing PA *θ with *ɬ where required before morpheme boundaries - although the merger of *l and *ɬ in most languages would make it hard to find evidence of grade 1 *l.

One term does seem to continue the grade 1 variant: PA *elekihkwi 'so much' (F inekihkwi, C iyikohk, M enekoh, cf. M en<:kohkwat 'it's so big around', pgO inikokkwa: 'be a certain size'). For segmentation, compare Mc telki:k 'it's such a size' and apsɬki:k 'it's of a small size' (presumably reflecting root plus *-ekihk(w)atki with the usual haplology). PA *el- 'thus, so' is probably rather isolated and obscure in this word, and two cases are recorded where daughter languages reinforce it by prefixing productive *eɬ- of the same meaning: F inenekihkwa:wi 'it's so big', and M enenekoh 'so much'.

Another reconstruction seems to show PA *el-, in a rather specialized semantic function (which may account for the rarity of grade 1 in the less specialized uses of this element). It is added after higher numbers with roughly the meaning 'that many':

(256) *el-, *al- 'be such a number (over 4)': PA *eli (M ene:h postposition 'number over a decade', e.g., meta:tah nian ene:h '15'); W (hɬ)l-, e.g., we?sag hɬliɬd 'they are 5' (cf. kúcɬd 'it's one'). Wiyot shows the old pattern for a quinary numeral system, while Menominee has shifted to decimal. Wiyot preserves the archaic pattern too in permitting classifiers after this root: W tɬkɬɬluk ɬlak '6 fish (or elongated objects)' [beside díkhak '3 fish' - Teeter 1964:36, 39], W wé?sag, ca-?lɬ-bewí-bɨcɬwɨ?n 'one dries them 5 days' (ta-dik-bewí-bɨcɬwɨ?n 'one is drying them 3 days'). The last example shows deletion of the initial short vowel after a preverb ending in a vowel - and an unexplained glottal catch.[6]

Another specialized function of the associative deictic is found in Menominee, where a reduplication of it serves as a prenoun meaning 'like': M <:ses-en<:niw 'like a man'. Parallel formations involving ordinary distal demonstratives - preposed in Algonquian, postposed in Wiyot - are: W ya (e.g., wáyic ya 'like dogs'), B 'anni [Taylor 1969:157] (e.g., ánni otsikékinaxsoàts 'like snowbirds' [Uhlenbeck, under ALIKE], and perhaps Ps ansa (e.g., ansa mihtakwsɬl 'like her father'). This last could be a compound of the ordinary plus associative deictics.

Now, in my earlier reconstruction of the Algic obviative suffix (and in many other items) glottal catch as the first member of a cluster is attested only by the Wiyot cognate, and is in the proper position to be the result of laryngealization [the final vowel of the obviative suffix has dropped in Wiyot]. Therefore, I am now persuaded that the glottal stop in the Wiyot obviative suffix is a separate morpheme from the one marking obviation (at least in origin).

It is also clear from the Algonquian evidence that the final *-i of the obviative suffix is an inflectional element - replaced by *-e: in the absentative endings (e.g., K -eene 'obviative sg.'). Thus, the proper reconstruction is:

(257) *-Vl, *-Vr 'obviative': PA *-Vli and inaccessible *-Vle:, W -V?l and -V?r, Y -(a)s. This replaces item (30).

The underlying identity between the unmarked Proto-Algic associative deictic *Vr- and *Vl-, on the one hand, and the obviative suffix, on the other, is now obvious. Proto-Algic evidently derived the latter from the former.

In the case of Algic, at least, it is not altogether surprising that this might happen. While most deictic elements make anaphoric reference to a previously mentioned or known entity which is THE SAME as the one being specified, the associative one refers to ANOTHER entity to which the present one (or its location) is being compared ['like that' versus 'that', 'to there' versus 'there']. Association generally implies similarity, but also nonidentity.

This nonidentity may have been with respect to the primary referent of a discourse often enough to lead to its implication (and later specification) of secondary reference. This would have led to its use as a discourse marker (see Goddard 1984), and its syntactic uses would have followed as the result of grammaticalization - especially in redundant environments.

If this is in fact what took place, we may ask how far this had progressed by Proto-Algic times. For example, Yurok lacks what might seem to be one of the main features of obviation, grammaticalization in possessed nouns. Instead, Yurok obviation is largely limited to deictic phrases in sentences whose main verb has a third person subject, and to a verb of being or having (with deictic origins, as we shall see in sec. 10 below).

The exceptions are its use in the adverb woy(s) 'strangely' (of unknown origin), and in emphatic wi(š) in some cases where it does not follow a personal pronoun originating as a demonstrative. The later cases are perhaps secondary to those

cases where it IS part of an old emphatic demonstrative phrase, and it's conceivable that 'strangely' originates in an adverb referring to non-Yurok locations (i.e., 'strange' = 'foreign').

Common cases of Yurok obviation involve its optional use in deictic adverbs: wonew(s) 'above', skeli(š) 'down', now(s) 'away', and several others. Examples are: skeli(š) ?o ?o:lineł 'they lay down there', and the compound wonews-leg 'moon [passes iteratively above]' - where it is obligatory. Common also are emphatic personal pronominal phrases, e.g., yo?łkoh wiš 'it is they (who)...' [compare nonobviative wi(?) 'emphatic']. It seems rarer in locative nouns: yonciš kic ?o key 'she sat in the boat' [yonci 'in the boat']. Finally, it is found in the irregular third person forms of ?- 'be, exist, have': ?ok?ws 'there is', ?ok?ws wahpew 'he has a wife' (and its negative counterpart mok?ws).

The close association of obviation and deixis in Yurok surely must reflect the state of affairs in Proto-Algic. The use of obviation in possessed nouns, as in Algonquian and Wiyot, must arise later as deictic verbs of 'being somewhere' come to mean 'exist' and thence 'have' (see sec. 10). This leads to possession joining deixis as an obviative category in these later two languages.

Such a development is natural enough to have been innovated independently in the two cases, but it could also have resulted from a period of common evolution of the two languages after Yurok split off from the parent stock. It can thus be added as a further tenuous bit of evidence for such a grouping within Algic, along with even more tenuous lexicostatistical evidence (see Proulx 1982:191).

It remains to explain why, if they have a common origin, associative deixis is word initial and obviation word final in Algic. Assuming as we do that they originate in a Pre-Proto-Algic deictic pronoun which evolves into an atonic function word and cliticizes, one of two possibilities seems likely: it was placed before the last word or after the first word of a sentence [respectively clitic types 5 or 6, and 3 or 4 - see Klavans 1985:table1].

Since there is plenty of evidence for clitics and particles in second position in Algic sentences, and none I know of for penultimate position, second position seems more likely for this element as well. However, if usage evolved in short sentences consisting of an adverbial or a nominal plus a verb, the two positions would coincide in any case. [The evolution of usage in short sentences seems reasonable: shorter and simpler forms tend to be analogical models for longer and more complex, as in the case of noun singulars being models for new plurals and the

like.]

As it cliticized, the old pronoun tended to 'lean left' in accord with the suffixing nature of Algic - and thus be enclitic to a deictic adverb or demonstrative phrase or the like which preceded the verb. Once this clitic had become incorporated as an inflectional suffix, its position was fixed and it 'traveled' with its host - i.e., other words could intervene between it and the verb. For example, see Yurok 'she sat in the boat' above.

However, in sentences consisting of a single verb, the old pronoun could only become proclitic to it (or change position). In such cases, moreover, it could only refer to the action of the verb ('she sat thus' or 'she went thither') - whereas in the longer sentences it would usually refer redundantly to locations ('she sat there') and gradually to assume its obviative functions. Here too, as the proclitic became incorporated into its host, it began to 'travel' with it. The split in positioning and meaning was achieved.

The foregoing suggests that verbs typically followed adverbs and nominal phrases in Pre-Proto-Algic sentences with the associative deictic.

5. Directional Preverbs

Some directional preverbs or roots seem to originate in deictic pronouns. The associative deictic of Proto-Algic has an adlocative use ['thither'] as we have seen, and in some of the Algonquian languages ordinary distal deictics assume this function: Ps nat- 'go there to', RhO ni- 'go away' [from *na, *ni], and Ch ta- 'away from speaker' [from *ye:] - beside conservative swC it- [changed e:t-] 'thither'. See Proulx (1988:319, 324) for the final Ps t. Compare PA *aɬem- 'off yon way' and *aɬpen- 'off and away', which seem to have the associative deictic as their first syllable.

Examples are: Ps nacihpu 'she goes there to eat' (Leavitt 1985:74), RhO ni-giiwe:d 'go home', Ch é-ta-hóó?óhtse 'she went home' (Leman 1984:336), and swC ta:nite: e:tohte:yan 'where are you going?' (Voorhis 1984a:20-1). The PA reconstructions are: *awaɬe:wa 'she takes her away with her': F awane:wa, C awate:w, M awa:n<:w; *awatawewa 'she takes it away with her': F awato:wa, C awata:w, M awa:ta:w; *aɬem- 'off yon way': F anem-, C atim-, M an<:m-, Mc elm- (changed); and *aɬpenV 'off and away': C aspin, M ahp<:n.

Compare Y hesi and W dák 'toward' [perhaps respectively from associative *eri and distal *na plus enclitic k from #251], e.g., W dák, bú?r and Y hesi pur 'toward the north'.

Proto-Algic also has:

(258) *ma, *me 'go and do': W ba 'go to' (ba lápłił 'she goes to pick it'), Y me 'went and did' (me tmegok? 'I went hunting'). Compare F mawi- 'go and, go to' (mawa:pame:wa 'she goes to see her') - evidently combining this particle with PA *awi- 'go do' (NiO awi- 'go over to' [RhO nwii-wi-nbaa 'I'm going to bed'], M awe:h- 'go off to perform action'); and compare the PA root *aw- in *awał- 'TA: take away', *awat- 'TI: take away', and in C awas 'get away!' and awite: 'so there you are!'. Compare also W bá 'postposed particle: all the way to, beyond' (Teeter 1964:96), and C awasi-, awasite: 'beyond' and awasime: 'further, beyond'. This reconstruction replaces #227 [*mawi-].

Unexpectedly, the Proto-Algic and PA elements reconstructed in #258 resemble the two PROXIMAL demonstratives *m- and *w-.

Motion 'from somewhere', i.e., toward the speaker, is signaled by PA *wenči- 'come from' A2183 [*went- A2189], based on the AI verb *wem-'come' plus the common extension with TI *-(V)t (see Bloomfield 1946:sec.105). C o:- 'from there' evidently preserves the shorter form, with truncation of the *m. Cheyenne has neh- 'toward the speaker', evidently from *ni after the latter has shifted to proximal in that language. Compare W wik, Y meł 'from', which look like proximal demonstratives plus locatives.

Examples are: swC ta:nite: ohtohte:yan 'where are you coming from?' (Voorhis 1984a:20-2), Ch é-nex-hóó?óhtse 'she came home' (Leman 1984:336), W wik, bú?r 'from the north', Y cmeya:n neskwecok? meł kohpey 'yesterday I came back from Crescent City'. Teeter (1964:96-97) states that both W dák 'toward' and wik 'from' may on occasion be translated as 'in the direction of'.

6. Temporal Preverbs

Algic has several temporal preverbs derived from deictic pronouns. In Ojibwa, where demonstrative *ni has not become proximal as it has in Cheyenne, there is a preverb RhO ni- 'in the future; go and do'. Woods Cree has a first person future preverb na- (Greensmith 1985:68-69), e.g., n-a:héa:w 'I will place her' [ahéa:ci 'as she places her']. These elements suggest that the future is a place one is moving toward.

The other side of the same coin is seen in swC ohci from PA *wenči-'come hither from somewhere', which in addition to its inherited function is used to mark the past tense in negated verbs (replacing ki:- of affirmative ones): swC mwac ohci-ki:we:w 'she didn't go home' beside ki:-ki:we:w 'she went home' and mwac wi:-ki:we:w 'she doesn't want to go home, won't go home' (Voorhis 1984a:11-1). Here the past is metaphorically a location one comes from.

These usages exemplify what Fillmore (1971:28-29) calls 'the moving world metaphor' for time, in which we and the material world are seen as moving forward in it - an idea already perfectly familiar to European culture. Indeed, the future tense in English employs the verb 'going to' as auxiliary, and French and Spanish have parallel formations. Closely related to this is the Algonquian use of *wenči for causes, which are seen as prior to their effects in time: wO we:kone:n onci, Algonquin 8ekonen 8endji, Mh gaquai watschi, Mc koxowey wčit, Mi katoandji, K we:ne:hi oci, N toh wutche, L ten 8agi 'why?'.

There is another way of looking at our changing position in the temporal dimension, which Fillmore calls 'the moving time metaphor', where for example 'tomorrow is comming'. The Iroquoian languages tend to prefer this way of viewing time in which the future - the time yet to come - is seen as the rear part of the temporal dimension, much as the back part of a passing train is the part yet to come.

This explains, for example, the meanings of Mohawk ohá:ką 'behind, later' in contrast with PA *wetayenki 'before, behind, earlier' (Proulx 1980a:290) and PA *ni:ka:ni 'in front, ahead, in the future' (F ni:ka:ni, rhO niigaan, C ni:ka:n, Pe níhkvnni [Voorhis 1979:72]). It also accounts for the development of the distal prefix y- into a marker of the past tense in that language (Bonvillain 1981:62), and the use of the proximal prefix to signal the future in Oneida and Cherokee (Abbott 1981:56-57). Contrast this with the opposite developments we have just reviewed in Algonquian, where distal implies future, and proximal past.

Yurok is like Iroquoian rather than Algonquian in this respect: it favors the moving time metaphor. Thus, it has poy(ew) 'before, in front' and hinoy(k) 'after, behind'. The situation is less clear in Wiyot, but if the first syllable of W cbíwan 'afterwards' is related to the last in W wičbí 'behind' - as the respective syllables in W kíłi 'right now' and wíkił 'now' presumably are - this language may also be of the Iroquoian type. W mi 'soon' [presumably from the old proximal pronoun] also, if it is an innovation, links the proximal with the future (see #247 above) - and thus points in the same direction. So does the Wiyot nominalizing particle na 'the one who ... a while ago' (Teeter

1964:66) - evidently from the distal demonstrative *na - which links the distal with the past. [There is also W ku walákw 'that (next) morning', where temporal location relative to the present isn't clear.]

Three temporal preverbs are reconstructed for Proto-Algic: *wi 'assured or volitional future' #247, *ki 'previous action' #250, and *khe, *kha 'future of possibility, obligation, or appropriateness' #248. The first could plausibly be related to PA *awi- 'go do' [discussed in sec.5 above], and ultimately reflect the proximal demonstrative *wí (see Proulx 1988:sec.2.2 for initial PA *a). In any case, *awi- is surely the source for M aw 'preverb: shall, will' - although the M n in the prefixed form [e.g., nenaw] is unexplained. [In Cree and Ojibwa 'will' takes on a secondary meaning 'want' - which may then apply to the past as well as the future: RhO niw waa-miigaan'gojin 'those who wanted to fight her'.]

PA has two more preverbal particles marking the future of possibility, obligation, or appropriateness: *ta (C ta-, RhO da-), and *ĉi (C ci-, RhO ji-, Ch htse-; M cew [-c in prefixed forms, enclitic with demonstratives] 'hypotheitcal, possible, or reported action'; Ab -ji [Laurent 1884], Ps -c, -hc, -ɬc). *ta is used where no prefixes are present - except apparently in the plain conjunct of Cree and Ojibwa, where *ĉi is used. *ĉi is used generally in the other languages cited. In Abenaki, it occurs in particle-typical second position (on any word); it is a preverb in those languages that prefix it.

Examples are: RhO wda-ndawe:ndaan ji-ni-giiwe:d 'she wants to go home', pooj da-wi-nokii 'she has to go to work', ndaa-ni-maajaa 'I ought to leave'; Ch tse-ana?o 'she'll fall off'; M enecewak 'it must be that one (animate)', ayocewak 'it must be this one (animate)', Ab n'damis-ji k'sagamegw 'my dog will bite thee', n'd-ai-ji Molian 'I'll be in Montreal', asma-ji n'wajônôwi 'I shall not have had' (Laurent 1884:122, paradigms); Ps knɬmiyulc 'I'll see you', tan ɬc ɬlu ktɬlehlanen 'what shall we do to her?'; Compare also M cemekat 'as it would seem', and the to in M wɛ:kito(wa)k 'what, I wonder, is it?'.

PA *ta- and *ĉi 'future of possibility' would appear to reflect the Proto-Algic discourse pronoun *t- #253, used for known but previously unmentioned entities. PA *ta:- 'would, could, must, can' (RhO daa-, Moose Cree ta:-) would appear to be a stressed variant of PA *ta-. Compare the second syllables of Y kiti 'future' (kiti ta?anoy?ɬ 'it's going to be hot') and kitu 'future: going to do' (kitu ɬku:?moh 'we're going acorn gathering') - which essentially appear to be there to reinforce the first. *ki 'previous action', on the other hand, surely reflects the other Proto-Algic discourse pronoun: *k- 'the one

previously mentioned' #251. *wi 'assured or volitional future' reflects proximal *w-.

There is no doubt that *w- is proximal, and it seems reasonable to view *k- as distal: it specifies a reference made at another time (not the present). Wiyot and Yurok ku, for example, are glossed 'that'. The position of discourse *t- on the proximal-distal scale is less obvious. However, in my view it can be considered proximal since it specifies a reference only being made in the present (and not at another time). Moreover, it seems likely that discourse deictics evolve from old demonstratives (as they do in Cheyenne), and one cannot imagine where a 'first reference earlier' versus 'now' distinction would come from if not from a distal versus proximal one.

All this establishes that Proto-Algic favored the moving time metaphor. Hence, Algonquian languages have two layers of temporal preverbs: ancient ones inherited from Proto-Algic, where distal = past and proximal = future, and the later innovations with the opposite pattern.[7]

There is a kind of parallel between the findings in this section and those in the previous one on directional preverbs. While it is distal demonstratives that get used to indicate 'motion away' in the various Algonquian innovations - and indeed the associative deictic which serves this function in PA seems to have a distal background - we saw that the reconstructable Proto-Algic preverb *ma, *me 'go and do' #258 looks like a proximal. So too PA *awi- 'go do', certainly related to future *wi and ultimately proximal.

Could the use of proximals for 'going to do' reflect a goal centered reference point as opposed to the speaker centered one we use in English? That is, just as we may take the addressee's point of view and say 'I'm coming over' rather than 'I'm going over' (to someone on the phone), is it not possible that the speaker of Proto-Algic said something equivalent to 'There are lots of berries by the river, and I'm COMING to pick them' (perhaps visualizing the berry patch) where we would say 'I'm GOING to pick them'?

Deixis in the spacial and temporal dimensions is generally quite similar (or identical) in the Algic languages, but if time is viewed as moving toward us, it seems unlikely that space will be similarly visualized. Could not a goal centered reference point for motion in space restore parallel use of preverbs?

There are no answers to these questions within Algic, of course, and hence they lie well beyond the scope of this paper. However, if these speculations are correct, some of the languages

of the world with moving time metaphors will also turn out to have goal centered reference points for verbs of certain kinds of motion.

7. Relative Pronouns

One relative pronoun root is reconstructable for Proto-Algic:

(259) *?- 'relative pronoun: where, when, who, what, why'.

(a) Uses of *?a, *?e. PA *a- (usually changed *e:-) 'preverb complementizer: where, when, who, what'; W ha 'nominalizer, locative of quasi-verbs'; Y ?o 'locative, comparative'. This pronoun seems to go into the formation of verbal nouns of habitual (durative, iterative) action or state for the most part in Algonquian, and was perhaps nearly always stressed.

Examples are: RhO a-bmi-noogseg 'the station' [i.e., 'where it (the train) stops going along'], e:-bngishmog 'in the west' [i.e., 'where it (heavenly body) sets'], B ao?takúsi 'when it's evening' [with preverb a?- 'when, whenever' (Taylor 1969:306), C e:h-pi:htoke:t 'when she came in' (Wolfart 1973:46), Moose Cree e:-takwa:kihk 'in the fall', RhO e:-kandood 'baseball fielder' [i.e., 'the one who is on the lookout'], e:-miijid 'what she eats', swC e:ka: ka:-ohci-oso:niya:miya:n 'because [that's why] I didn't have any money', e:-ki:-a:hkosit 'because she was sick' (Voorhis 1984a:38-1); W ha-táɬi?yɬk 'on my ship', haliɬ-wímɬlutwu?y 'what one floats with' (Teeter 1964:82, 48); Y ?o ket?u?l 'there is a lake there', ?o tepo:noɬ 'in a forest', kic numi ?e?gah ?o lekwo?ɬ ku ?o?leɬ 'they were just eating when the house fell in', won so?n ?o ku yok ni hunowoni 'it is different from those that grow here' (Robins 1958:103, 145, 146). See also #245, 246, 262.

The glottal catch in the Blackfoot preverb appears to me to be 'morpheme-final ?' (Taylor 1969:106-108), at least in origin, and similarly the aspiration in C e:h- must have arisen from the actions of external sandhi. W lɬ is also the product of external sandhi (before a root beginning in a w). Compare W haliɬ-wɬtkɬnɬgiɬ 'on her nails' (Teeter 1964:26, 82).

(b) Uses of *?i. PA *e- 'there', W hi 'then (immediately after that)' [see Teeter 1964:88], Y ?i 'where, why, then'. Examples are: C ita 'there', ite: 'thither'; uD ika 'over there', M emes and bO ima 'there'; M ⟨? 'here is, voici' (ayom-⟨? 'here she is'); W hi-tɬktaliɬ 'then she jumped across' (Teeter 1964:85); Y kus ?i k?eme?wome?mo?w 'where are you from?', wit ?i numi meɬ wecahcew 'that's why it's difficult' (Proulx 1980:297, n.31), tema

łoy ki ?nekweget tu? yo?łkoh ?i nu:?m 'I tried to visit you but they arrived at the time' (Robins 1958:103).

(c) Uses of *?o. PA *o: 'locative [restricted]' (Moose Cree o: 'immediate vicinity' [ta:nta o: 'where (right around here)?']; C o:ta, M omas, bO omâ 'here'; W hu- [hu-tá-lu?lɨwuy 'when they dance', ku?wíl, hu-tá-dɨkw 'persons who die' (Teeter 1964:65, 107)]; Y ?u 'locative' (not 'past' pace Robins 1958:98, sega?ani no:ł sohci ?u gek?wa 'often he found it far up in the hills', where the past tense is clear from the context - texts 166 line 9). Compare Y kitkwo ?u = kitkwela 'still', where ela is probably related to locative ?ela (again not 'past' pace Robins 1958:99): kitkwo ?u megey wi?łk?oh 'it is still mourning to this day', yo? kitkwela nohte?n wecwin 'she is still able to talk' (Robins 1958:118, 102).

It is known that glottal catch dropped in initial position and in consonant clusters in Algonquian (and that glottalized consonants merged with simple), but the very scanty evidence suggests it may have been preserved between vowels (see #218). If so, the relative pronoun may have yielded the PA pronominal locative *-ahi 'locative #1' (Proulx 1988:322), and the durative one *-ahe: 'adlocative', as in Mh nohà 'hither' and náha 'thither'.

8. Personal Pronouns

Algic personal pronouns are built from a dependent medial *-V1(aw) 'self' plus allocative prefixes:

(260) *k?V́1(aw)a 'thou': (a) PA *ki:1(aw)a A896, W khɨ́l, (b) Y ke?l, kel-.

(261) *k?V́lawa:wa, *k?V́lewa:wa 'ye': (a) PA *ki:lawa:wa, (b) PA *ki:lwa:wa, Y kelew. Compare W khíl waw [or khílɨwaw ?]. Replaces #132, where the PA forms are reconstructed.

(262) *kwV́lɨli, *kwV́liri 'she or it': (a) W kwilɨ́?l, (b) Y kwelas. Cf. PA *wi:la A2233 - or *wi:lawa (?), lacking the obviative suffix. Compare also Y ko?l 'something, anything' and ci:ko?l 'everything', without obviation.

Glottalized *k? evidently gives Y k by dissimilation in Y ke?l, and simple Y k in the plural may be analogical. It is uncertain why Y ke?l and ko?l have glottalization, but some other Yurok particles and pronouns do as well - perhaps ultimately from predicative use (see #218).

Final *(wa) is lost in all of the languages, but is set up for PA singulars on the basis of derived forms (see Haas 1967:141). The 'ye' forms evidently lose *(wa) by haplology.

Third person personal pronouns are known to often originate from demonstratives (Greenberb 1978:75), and we have some cases of this in Algic. Clear Lake Ojibwa uses its zero root demonstratives in this way, e.g., kiw 'they = those (animate)'. Similarly, Virginia yowah 'she' (beside yowkk 'this' and yowhs 'these'), and Y yo? 'she = that one (animate)'. Compare Y yo?łkoh 'they' (with no demonstrative counterpart).

9. Interrogative Pronouns

Generally speaking, Algic languages have four stems for question words: one each to enquire about (1) persons ['who?'], (2) things ['what?'], and (3) circumstances ['WH-: which, where, how?', etc.] and (4) one for yes-or-no questions. Following particles and sometimes verbal initials generally make further specifications (see Black 1971:148-149 for the details in Ojibwa).

Categories 1 and 2 share the feature of concreteness - the specification of entities. Being so closely related, there is neutralization of the two in some cases. In Cree, for example, nonliving things of animate gender may take either interrogative; if the gender is unknown to the speaker, 'what?' is used (Voorhis 1984a:8-4).

Categories 2 and 3 share the feature 'nonpersonal' ['animate', in Algonquian]. In Cree, again, there is free variation between the two pronouns for forming 'why?' questions: ta:ne:hki and ke:kwa:n ohci 'why?' (Voorhis 1984a:38-1). This variation probably dates back to PA - compare L ten ðagi and Mh gaguai watschi of the same meaning - and seems to be an aspect of a more general rule by which the third interrogative can optionally replace the other two in a clear context [see Black (1971:151) for discussion and Ojibwa examples].

Analogical leveling or reshaping, which not surprisingly is quite common, generally is among words with shared semantic features [1+2, 2+3 - not 1+3 except where 2 is also involved].

For interrogative stems Proto-Algonquian evidently had (1) *we:n- 'who?' A219 [reconstructed with initial *a-], (2) *we:kw- 'what?' A2158, and, for 'WH-', (3a) *t-, (3b) *a:n-, or most commonly the two together: (3c) *ta:n-. For a discussion of the unstable initial *a- in question, which resembles that of some demonstratives, see Proulx (1988:sec.2.2). 'WH-' reconstructs as

follows:

PA *t-, *a:n-, *ta:n- 'WH-': (a) B t-; (b) M a:n-, O a:n-; (c) F, K, C, M, bO ta:n-, Mi, Ps, Mc tan-, Ab, Mh tan-, N, Ch ton-. Short forms lacking the *n are found, notably in several Middle Atlantic and (formerly) adjacent languages: M a:?, N toh(hen), L ten, uD tá, and Montagnais ta espich 'quand?' (Silvy 1678-84:151). Perhaps related as well are Mc teken 'which?', Ab tsigá, L takatch, and Mh tákatch 'when?', and Ch tosa?a, Mc tani, and Ps tama 'where?'. It may also be noteworthy that the languages with stem 3b (*a:n-) are just those with zero-root demonstratives [see Proulx 1988:sec. 4.3].

In most of the Algonquian languages, the 'wh-' interrogative is also used as a relative pronoun, which may help explain stem 3b. PA *a:n- may reflect Pre-PA *?a:n-, composed of Proto-Algic *?- 'relative pronoun' plus analogical *-a:n from interrogative *ta:n-. If so, Algonquian has simply lost the contrast between Pre-PA *?a:n- 'relative pronoun' and *ta:n- 'wh-'.

The 3 supplementary question stems of Algonquian are rather unstable historically, with a marked tendency for analogical replacement or reshaping to occur within the set along the lines mentioned above. For example:

PA	Kickapoo	NWR Montagnais	Blackfoot	
*we:na	we:ne:ha	[če:kw]e:n	[t]a- (AN sg.)	'who?'
*we:kwi	[we:n]e:hi	če:kw[a:n]	[ts]i- (IN sg.)	'what?'
*t(a:n)-	ta:n-	ta:n-	t-	'WH-?'

Bracketed roots are analogical to an adjacent ones in the same column: 'what?' becomes an inanimate counterpart of 'who?' in Kickapoo; the Montagnais root for 'what?' has been replaced by a borrowed indefinite pronoun, its reflex of *ke:kw- 'something' (Ps kȅkw-), and it has spread to 'who?'; and so forth. Note also that *-a:n has spread from 'WH-?' to 'what?' in NWR Montagnais (and in Moose Cree, which has ke:kwa:n).

These pronouns most commonly inflect for the singular, but plurals are attested: C awi:niki 'who (anim. pl.)?', and C ki:kwaya 'what (inan. pl.) ones?' [Wolfart 1973:34-35, reflecting a dialect that has i: from *e:]. As these examples show, the inflectional finals pattern as they do for demonstratives: stems ending in nasals require link vowel *i, those in semivowels *a.

9.1. Proto-Algic Interrogatives. Just as some Algonquian languages have analogically replaced some interrogative elements, Wiyot and Yurok have leveled parts of the Proto-Algic system. This and several phonological difficulties make the reconstructions which follow tentative:

(263) *tá:ɬ- or *tV́ɬ?- 'WH-?': PA *t(a:n)-[reconstructed above], W táɬwa (with W -wa 'interrogative'). Cf. PA *a:n- (from relative *?a:n- ?). Recall that **ɬ gives PA *n, W l, and Y ɬ before a word-final vowel (see items 31, 32), and W l regularly loses voice in a consonant cluster (see Proulx 1982:120, 1984a:sec.6). Stress is suggested by Mc ta:n, although the vowel length here could result from the monosyllabic character of the word. The alternate reconstruction with the link vowel and glottalized *ɬ? is suggested by #265-266.

(264) *wékwi 'what?': PA *we:kw- A2158, W kwáɬwa. W -áɬ is analogical from the previous item, in just the manner of Cree-Montagnais -a:n above, and its stress evidently suppresses that of the previous syllable (see Teeter 1964:37). *we drops initially before a single obstruent in Wiyot (as in the set 1b prefixes - see Proulx 1984a:169), leaving only labialization of a following **k (which is already labial in this case). Stress on a vowel causes it to lengthen in PA.

(265) *wV́ɬ?a 'who?': PA *we:n- A219, W kwíɬwa [cf. kwíɬta 'somebody', ku?wíl 'living person' - root ku?w- 'be alive' (Teeter 1964:107)], Y ti?now. The Wiyot root is analogical to the preceding item, the Yurok one to the next preceding one. The final Y -w may be from the emphatic postposition *wé #259 - or perhaps it is related to W -wa 'interrogative'.

Glottalized nonstops merge with simple in PA and Wiyot. As for Yurok ?n, there is some irregular (and sometimes optional) synchronic alternation of stem final ɬ (and l) to n when preglottalized by the third person inflection Y -?: lekwo?ɬ ~ lekwo?n 'she falls' [stem lekwoɬ-, Robins 1958:38]. Evidently then, **ɬ? regularly gives PA *n, W l [ɬ in clusters], and Y ?n before a word final vowel. The first and last items apparently contain by-forms of the same second element:

(266) *-V́ɬ?- '____': *tá:ɬ?- or *tá:ɬ- 'WH-?', *wV́ɬ?a 'who?' (PA *we:n- A219, W kwíɬwa), cf. Y ti?now 'who?', and W kwáɬwa, Y ti?n(iŝow) 'what?'.

It is clear from the Algonquian evidence (e.g., B t-, O a:n-, and analogical C -a:n), as well as its analogical spread in Wiyot, that *-á:ɬ?- at least is a separate element. Hence, its

first vowel could be a link vowel. As for *-V́ɬ?a in #265, the reconstruction is only valid if its first vowel is a link one.

Differing link vowels in otherwise cognate sequences are not unknown: compare link *e: in PA *-e:lanyiw (reflected in C nite:yaniy, M net<:naniw-, O nɨnte:naniw 'my tongue') with link *i: in PA *-i:lanyiw (reflected in most of the other languages, e.g., F ni:naniwi). [The differing form of the prefix is automatic before these vowels.] For Algic, there are the personal pronouns, and a body-part noun:

(267) *-skwVtkani 'neck': PA *-ɬkwe:kani (#165), W (hu)wɬswitkɬdɬ?l 'her neck', with medial *-Vskw (#165). For the loss of *t between a long vowel and obstruent in PA, note the same loss in Ojibwa (Bloomfield 1957:53) and compare losses of *n in the same environment (Proulx 1964:196).

Differing link vowels thus do seem to be found in otherwise cognate sequences, and there is no reason to doubt that *-Vɬ?- is just such a case.

The Proto-Algic interrogatives thus form the following system:

Proto-Algic	PA	Wiyot	Yurok	
**wV́ɬ?a	*we:na	[kw]íɬwa	[t]i?now	'who?'
**wékwi	*we:kwi	kwáɬwa	[t]i?n(iŝow)	'what?'
**tV́ɬ?-	*t(a:n)-	táɬwa	kus	'WH-?'

The bracketed roots in Wiyot and Yurok are analogical.

The ultimate source for Y ti?n- is *t-, which spreads upwards through the Pre-Yurok set, and *-íɬ? which spread upwards or downwards. After the leveling was complete, Yurok replaced 'WH-?' with kus - evidently an interrogative counterpart of Y ku 'the, that, when' (from **ko: 'the aforementioned' #251 above).

It is obvious that these items have constituent parts: *w-, homophonous and perhaps identical with the proximal demonstrative (with which it shares the unstable initial PA *a-); the root *t- originating from *t- 'the one known but previously unmentioned' [#253 above], in much the same manner that Y kus originates from *ko:; and *-Vɬ?- #266.

If *w- is in fact a demonstrative, it's function could probably could be reinforced by postposition - Algonquian

demonstratives are optionally preposed and postposed to their heads - and this may be the origin of final W -wa in the first two items (especially as its initial manifestations have been lost). The third item would show analogical leveling in this respect.

10. To Be (Somewhere)

Deictic and interrogative pronouns often are homophonous with the roots of verbs 'to be' - and sometimes 'to have'. In Proto-Indo-European, for example, compare the discourse deictic *sV with *(e)s- 'be' (Meillet 1937:326, 199). Such similarities are also found in Algic, with distal PA *(a)y-, for example, resembling the root in C aya:w 'she's there, she is, she has it', and changed conjunct Ps eyit 'when she was there, when she had it'.

This is not entirely surprising, since the 'be' verbs typically have 2 or more of the following meanings: (1) 'be [in a certain place]', (2) 'be at home'; (3) 'stay [in a certain place]', (4) 'dwell somewhere', and (5) 'exist [in a certain place]'. All of these meanings signal position, usually anaphorically. As for verbs of 'having', they are related to those of 'being' via the equivalence of sentences such as 'it is hers' and 'she has it'.

Algic languages often have nonverbal predicators, which may be nouns, pronouns or particles, and which (in some languages) take verb-like inflection: W máti? 'it was wood, there was wood', Algonquin asinitokenan 'c'est peut-être des pierres' (Cuoq 1966:40), Mc witapewatɨp'nn 'she was their friend'; M ene? 'it is that, there, then' (eneh 'that', enes 'there, then'), Mc mu nek'mewey 'she or it isn't hers' (nek'm 'she'); C a:stamitik '(you pl.) come here!' [a:stam '(you sg.) come here!'].

In all of these constructions, as well as in equational sentences, the idea of 'being' is expressed by a zero root whose inflection (if any) is added to the preceding word. It seems plausible therefore to see in the various verbs 'to be' (a) old locative pronouns used in preverbal position, plus (b) a zero root 'to be', and (c) inflection.

10.1. Yurok. Let us consider, for example, the origins of Yurok ?- 'be, have, exist, dwell', as in Y ?ok?w 'she is (there)', ?ok?ws wahpew 'he has a wife', and kus ?o:?m 'where do you live?'. By the hypothesis just sketched, it must have evolved from the locative particle Y ?o - and ultimately its Proto-Algic antecedent, the relative pronoun *?a 'where, when, who, what, why' #261.

10.2. Proto-Algic *t-. Another verb 'to be' with likely origins in a deictic pronoun is Proto-Algic *t- 'be, exist, dwell' #221, presumably from a locative use of the Pre-Proto-Algic pronoun which also becomes discourse *t- 'the known but previously unmentioned ... [place]'.

This locative origin is seen in the following. First, inflected with *-a, it forms a verb *ta:- 'to exist (somewhere), stay, dwell' [#222].

Second, the same locative function is seen in W t- 'relative/ interrogative of location' (e.g., W tɬwa 'where?', táɬka 'wherever, whenever', ĉi 'that's where'). Compare also Y toy 'there'. This item is perhaps related to *táɬ?- (or *ta:ɬ-) 'wh-?' [e.g., 'where, when'] #263. Its original function is perhaps interrogative, but if so it also generally replaces relative *?- in PA and Wiyot (where *? drops). O a:n- would be an example of nonreplacement.

Third, an enclitic PA *t- [from *t- 'be' ?], inserted between a demonstrative pronoun and PA *-ahka [from *al-ka ?] 'in the direction of' signals a fixed spot: Ab tándahka 'where' versus K taanahka 'where to?', and Pe natáhk 'there' (Voorhis 1979:72) versus F manahka 'in this direction' [with Pe na 'that (animate)', and F man-'this'].

Fourth, prefixed to a directional root in Algonquian it removes any connotation of motion. For example, with the associative deictic *aɬ-'thither' - generally attested elsewhere in its e-grade vowel form - it forms a composite root *taɬ- [with *e:n- prefixed for initial change] 'there' #223, usually used as a preverb, specifying static locations. Thus, compare Pe tal- 'at that place' versus al- 'to that place' (Voorhis 1979:71), M tano:hn<w 'she walks there, then, through that length of time' versus eno:hn<w 'she walks thither, in that direction, thus', and F tana:piwa 'she looks there' versus ina:piwa 'she looks thither'.

It is possible to suggest an etymology for the unique kind of initial change found in this stem in PA. Changed *e:ntaɬ- perhaps reflects the sequence: relative *?a 'where, when, etc.' #259a plus demonstrative *ni 'there' #246, plus *tar- 'at that place' #223. There is regular initial change (PA *e: from *a), and the archaic but regular loss of *i before an elemen- beginning in *p, *t, and *k (Bloomfield 1946:sec.17) as in the case of preposed *aɬ- 'thus, thither' (see #255).

Evidently, the relative and locative pronouns were only incorporated into this stem in the changed mode of the conjunct

[presumably at a time when participles, iteratives, and the like had yet to split into separate modes]. No doubt it expressed the extra specification of location in a verb phrase meaning, e.g., 'there where she walked' (in contrast to independent 'she walked there', and simple conjunct 'where she walked'). [This type of initial change became generally associated with the Algonquian root *t- 'be' in several of the languages (but not Micmac), spreading to other stems in which *t- occurs. In Cree and Menominee, unchanged counterparts of the prefix were analogically created.]

10.3. Continuative Aspect. *t 'be' develops into a marker of continuative aspect in both Wiyot and Passamaquoddy. In Wiyot, *ta is involved: W ta- 'durative preverb' (e.g., khwɬli ya ta-lâlit 'are you going around here?' - Teeter 1964:88, 104). In Passamaquoddy, it is the composite root *tal- [with initial change *e:n-]: Ps tɬlluhke 'she is working', etɬlɬluhket 'when she was working' (beside luhke 'she works', eluhket 'when she worked').

It does not seem entirely clear in the Wiyot case if the preverb derives from the verb 'to be permanently located' or directly from its source pronoun - but its verbal origin is clear enough in Passamaquoddy, where the PA source is well known (see A264-265). Moreover, the use of a verb 'to be' for continuative aspect is seen in other languages, e.g., Spanish está ...-ndo 'she's ...-ing' (as well as in English). Hence, this is probably the path of development in Wiyot as well.

Blackfoot also has a preverb of continuative aspect, aa-. Its origins are not certain, but it could reflect PA *ay- 'be there' [Saulteaux and Cree aya:-, Ottawa ya:-, Pe ayi- (Voorhis 1979:58), Ps eyi- and Mc ey'm- (changed conjunct), M i:-]. This in turn is from Proto-Algic *y- 'distal demonstrative'. It is not certain what the stem final was in PA, but it may be significant that those languages with final -a: after this root include permanent location ['dwell, exist'] in the meaning of the stem (thus putting it in competition with *ta:- 'be, exist, dwell'). [For loss of *y between a's, compare B taàa beside presumably analogical tayáa 'who, which (animate)?' - composed of interrogative t- plus animate singular -a plus enclitic yá.]

11. Inflection

We have seen in sec.1.2. that Proto-Algic had 3 degrees of animacy in its demonstrative pronouns: PERSONAL (with inflectional *-a), NONPERSONAL (with inflectional *-e), and INANIMATE (with inflectional *-i). Overriding these distinctions, demonstratives also had a RESTRICTED category (with inflectional *-o). In this

section we take up other uses of these inflectional vowels in deictics.

The attested Algic languages are somewhat inconsistent in their nongender uses of the inflectional vowels, but a few contrasts provide clues about the original situation. The best of these is that in Algonquian a shift of *-i to *-a in monosyllabic temporal preverbs functions much like the addition of the iterative infix *-eg- #25, where both signal initial change. Although initial change has been grammaticalized in PA, its original function is to convey iteration and to form participles of habitual action ('the one who always does X'). Hence, one can suspect an iterative background for *-a as well, versus singleness of occurrence for *-i. Similarly, Cree and Ojibwa use *ci 'future of possibility' in the plain conjunct, but *ta in the other (mostly changed) modes of the conjunct.

An iterative meaning for *-a explains why relative *?a turns into PA *a- (usually changed *e:-) 'preverb complementizer: where, when, who, what' and W ha 'nominalizer'. The resulting participles express habitual (durative, iterative) action or state for the most part. In contrast, *?i provides chiefly locatives of precise static location: PA *e-'there', Y ?i 'where, why', and W hi 'then (immediately after that)'.

Apart from its use for single specific occurrences, *-i is generally replaced by *-a in temporal locatives. Thus, compare *ma 'proximal time: when' #244 and *na 'distal time: then' #245 with *ni 'distal space: there' #246. Compare also W kas 'then, at that time', ya and yak 'then (after doing various other things)' [Teeter 1964:88], and W wa 'still [continuing to this time]'. This, together with our finding in sec.6 that Proto-Algic favored 'moving time' rather than 'moving world' metaphors in relating time and space, suggests that *-a was used for moving entities as well as iteration and the like - while *-i is static in contrast.

*-e is rarely preserved outside of Algonquian, and where it is its use generally seems similar to that of *-a. Thus, it indicates motion in Y me 'went and did' (but compare W ba 'go to do', see #258). Compare also C -me: in awasime: 'further, beyond' with W bá postposed particle 'all the way to, beyond'. Similarly, like *-a it seems to relate to time in W ditbé 'two times' and damé 'four times', versus space in W kucbi 'one place' with *-i. However, it also has a characteristic reconstructible use as the inflection of adverbial locatives (generally adlocatives and translocatives):

(268) *-é 'adverbial locative': PA *-e: (F, K -e; C -e:), W -è (usually attested as -é since it is rarely breath-group final). Examples: F na:hkani-tepehkwe 'all night', F

na:wi-kehčikami:we 'in the middle of the sea', K ni kiiseθwe 'in that month', K náisaapwahkiihe 'in the middle of the street', C awasite: 'on the further side (in time or space)', C o:te: 'hither' [beside o:ta 'here'], W kukwè 'in the old days', W dałé 'from behind'.

As the examples show, where duration, motion, or distance from a reference point are involved, this inflection is used for reference to space as well as time. It is only when a specific static point is mentioned that locative *-i is used (compare Mh nohà 'here to me' and K yoohi 'here'). In light of the relative similarity of their (nongender) meanings - and the fact that they are vowel grades of each other - it seems likely that *-e and *-a have a common origin.

*-o has a wide variety of uses besides restricted location, in which I discern no pattern (perhaps because it is so poorly preserved in Algonquian, the branch of Algic I know best). It is used to help form plurals in Wiyot, and in a topic marker in Yurok: W tu 'verbal plural', and topicalizing Y tu? 'and then'. It is unmarked against emphatic *-a in Yurok: compare the emphatic topic marker Y to?. There is also the prevert Y nu 'come, go', and ku 'go and do (future)' beside Y ki 'future'. Other examples:

*ko 'the one previously mentioned (restricted)' (#251): PA *-ko (swC e:kote: 'there [at a place previously mentioned]' [Voorhis 1984a:37-4], W ku 'that', Y ku 'that, the' [used to modify a noun] and as relative-interrogative 'when'. Compare W ku '(back) again': kwis-ku-lúwił 'suddenly she came back again' (Teeter 1964:88).

*?o 'relative pronoun (restricted)' (#259c): PA *o: 'locative [restricted]' (Moose Cree o: 'immediate vicinity' [ta:nta o: 'where (right around here)?']; C o:ta, M omas, bO omâ 'here'; W hu-[hu-tá-lu?liwuy 'when they dance', ku?wil, hu-tá-dikw 'persons who die' (Teeter 1964:65, 107)].

This gives the following spacio-temporal inflectional endings in deictics (besides *-Vnki 'locative' #34 in nouns):

(269) *-e [meliorative *-a] 'extended, motile, durative'. Since *e is by far the most common Proto-Algic vowel, this suffix was probably a neutral one which achieved its meaning only from the contrast with the other two (below), and meliorative vowel grade. See #268.

(270) *-i '(extended ?), static, punctual'. The 'extended' category is clear in Blackfoot (and no doubt present in PA), but its Proto-Algic status is uncertain. As an alternative, it could have been neutral with respect to the extended-restricted

contrast.

(271) *-o 'restricted'.

Algic gender could well have arisen out of the association of high animacy with motility, and that of persons with the meliorative vowel grade. Hence, where MOTILE entities are involved, personal gender would be expressed with meliorative *-a and nonpersonal gender with neutral *-e. Inanimate entities would be static, and thus would take *-i. If so, this 3 category quasi-gender system could have given rise to the differing gender systems of PA and Yurok directly - and we perhaps should not reconstruct fully-developed gender for Proto-Algic at all.

12. Discussion

We have seen how the Proto-Algic demonstrative and discourse pronouns have evolved not only into the sorts of grammatical markers Greenberg uncovered (mainly in the Bantu languages), but into some others as well. Sometimes the mechanisms of change are simple: one component of the meaning of a pronoun is selected, and the pronoun becomes a marker of it. Examples of this are 'otherness' in the associative deictic giving rise to obviation, and 'being there' in several instances giving rise to 'being'.

Another proposed universal tendency, for which there is considerable evidence in Algonquian (see Proulx 1988:318), is that distals evolve into proximals but not vice versa. The question that naturally arises is: if distals keep changing into proximals, where do all the distals come from? In such semantic domains as color nomenclature and cardinal directions, old terms are constantly being replaced by words specifying more salient entities closely associated with them: 'red' by 'bloody', 'south' by 'noonday (sun)', and the like. So the question becomes: what salient entities are associated with distal position?

As one of the two sets of PA demonstratives I reconstructed elsewhere (Proulx 1988:315-317) are locatives in the Proto-Algic system, it appears that locatives are a possible source for demonstratives (if the semantics are correct in the two reconstructions). That is, a position in space is more salient than an entity located at a specified position - perhaps because it's semantically simpler.

What we have here is semantic evolution from the simple (and specific) to the complex (and general), with diminishing salience. The further evolution of demonstratives into discourse pronouns continues this pattern, for the latter additionally

specify prior mention or assumed knowledge of the entity specified. It is only once an element cliticizes that grammaticalization begins - and with it renewed semantic simplification.

13. Conclusions

Proto-Algic had two single-consonant demonstrative roots (*w-, *y-) and two locatives (*m-, *n-), each with a labial for the proximate and a palatal for distal reference. It had two discourse pronouns: *k- 'previously mentioned', and *t- 'known but not previously mentioned'. The former is semantically associated with past time, the latter develops into Algonquian future markers.

The inflection consisted of only 3 endings, all referring to the distribution of entities relative to spacial or temporal dimensions (with past = distal, future = proximal): *-e [meliorative *-a] 'extended, motile, durative', *-i '(extended ?), static, punctual', *-o 'restricted'. The development of the MOTILE-STATIC and vowel grade distinctions into those of gender follows quite naturally [e.g., humans are +MOTILE, +MELIORATIVE]. It is not certain if this had crystallized into a gender system in Proto-Algic, or whether it did - in slightly differing ways - in Algonquian and Yurok.

The following deictics (with temporals in parentheses) are reconstructible:

	PROXIMAL	DISTAL
DEMONSTRATIVES:	*wo, *wa, *we, (*wi)	*yo, *ya
LOCATIVES:	*ma, *me	*na, *ni

	KNOWN BUT UNMENTIONED		PREVIOUSLY MENTIONED
DISCOURSE	*ta,	*ti	*ko, *ka, (*ki)

Proto-Algic also had an associative deictic (*er- 'like another'), a relative pronoun (*ʔ-), a personal pronoun base (*-Vl[aw]-), and a set of interrogative pronouns (*wVɬʔa 'who?', *wékwi 'what?', *tVɬʔa 'wh-?').

Algic demonstratives and discourse pronouns have evolved

along the following lines: LOCATIVES ——> DEMONSTRATIVES ——> DISCOURSE P., all of these ——> VERBS 'TO BE', TOPIC MARKERS, ASSOCIATIVE P. and the last ——> OBVIATIVE.

NOTES

1. Languages, their abbreviations, and the sources from which they are generally cited are as follows: Abenaki-Ab-Laurent (1884), Day (1964); Plains Cree-C-Bloomfield (ms.); Swampy Cree-swC-Voorhis (1984a); Western Cree-fwC-Faries and Watkins (1938); Delaware-D-Goddard (1969)<uD=Unami, mD=Munsee>; Fox-F-Bloomfield (ms.); Kickapoo-K-Voorhis (1974); Loup-L-Day (1975); Mahican-Mh-Mastay (1982); Menominee-M-Bloomfield (1975); Miami-Mi-Voegelin (1937-40); Micmac-Mc-Proulx (field notes), DeBlois and Metallic (1984); Natick-N-Trumbull (1903); Ojibwa-O-Bloomfield (1957); Central Ojibwa-bO-Barraga (1878); Western Ojibwa-NiO-Nichols (1979); Central and Eastern Ojibwa-RhO-Rhodes (1985); Passamaquoddy-Ps-LeSourd (1984); Penobscot-Pe-Voorhis (1979); Proto-Algic-PAc-Proulx (1984); Proto-Algonquian-PA-Aubin (1975), Siebert (1975); Saulteaux-wO-Voorhis (1984b); Shawnee-Sh-Voegelin (1937-40); Wiyot-W-Teeter (1964); Yurok-Y-Robins (1958), Proulx (field notes).

PA reconstructions found in Aubin (1975), Bloomfield (1946), and Siebert (1975) are respectively identified with the letters A, B, and S plus the item number.

Transcription generally follows that of Siebert (1975) for Algonquian, Teeter (1964b) for Wiyot, and Robins (1958) for Yurok. However, the following changes have been made: PA *$\underline{\text{ɨ}}$ is written for *$\underline{\text{0}}$, PA *$\underline{\text{s}}$ for *$\underline{\text{c}}$, PA *$\underline{\text{t}}$ for *$\underline{\text{x}}$, PA *$\underline{?}$ for *$\underline{\text{h}}$ between vowels, W $\underline{?}$ for $\underline{\text{h}}$ before a consonant, W $\underline{\text{a}}$ for $\underline{\text{o}}$, W $\underline{\text{ɨ}}$ for $\underline{\text{a}}$, and Y $\underline{\text{ɨ}}$ for inverted $\underline{\text{r}}$. For discussion of the changes, see Proulx (1984:168-169). Orthographic concessions to my word processor: $\underline{\text{s}}$ wedge is written as $\underline{\text{ŝ}}$, $\underline{\text{c}}$ wedge as $\underline{\text{ĉ}}$, schwa as $\underline{\text{ə}}$, and Menominee epsilon as $\underline{\text{ɛ}}$.

2. According to Greenberg (ibid. p.61), a discourse deictic becomes an article at the point 'where it becomes compulsory and ... [includes] things known from context, general knowledge, or ...the only member of its class'. However, he also recognizes that 'certain languages are on the borderline between two stages' - and this would seem to be the case for Cheyenne (with its 'unused' deictics) and Wiyot (with ta), as we shall see. [Teeter (1964:95) calls ta an articular preverb, but it clearly doesn't meet Greenberg's definition of an article.] In what follows, I shall assume it is possible for such borderline discourse deictics to become grammatical markers without necessarily having been compulsory articles.

Wayne Leman (1984:330-332) describes two Cheyenne discourse pronouns which make anaphoric reference to entities already known to the addressee. In his examples, one set - which he calls EVOKED - have as antecedents noun phrases containing an ordinary demonstrative pronoun [which in turn have common nouns as antecedents]. Another set, which he calls UNUSED - presumably because there has been no prior use within the discourse of the entities they refer to, have the addressee's background knowledge as antecedents. Both sets are somewhat article-like in their usage, making no reference to the entity's position in space [though their morphology suggests that they originated from a spatial metaphor, intradiscourse being 'near' and extradiscourse 'far']. It is partly by analogy with these pronouns that previous mention or its absence are suggested as distinguishing features for the Proto-Algic discourse pronouns.

3. The opposition between PA *ŝ and PA *ɬ is neutralized before a morpheme boundary (with *ŝ before *i(:) and *y, and *ɬ elsewhere) - but in this environment the Proto-Algic grade variation is still attested by the PA doublets of *l and *ɬ, as in PA *nal- 'windward' versus *naɬ- 'upriver' (Faries C nunim 'windward', nutimik 'up the river', and compare Faries C nutuhi'skum 'she walks up the river' for segmentation).

In consonant clusters, *r and *l are treated variously according to the language and their relative position in the cluster and word: common reflexes of *l are zero, l, ɬ, and less-common t, while *r gives s and ŝ (see Proulx 1984:sec.8). In particular, Yurok regularly has s and Wiyot ŝ and its grade variant s from *r in clusters (Algic #108, 111, 112). In addition, PA *l seems to correspond to Y s in word final position (Algic #29, 30, 111, 219). Thus, it is really only initially and between consonants that the new analysis changes anything.

4. The vowel length in Mc -te:t'm (TA) and -te:l'm (TI) could result from stress [ie.e., PA *-tél], but this does not explain the initial Mc t. More likely, there is incorporation of *-te:h 'heart (medial)' A2025, which is associated with thinking in Algic culture [W

d‡tw- 'think' (with d- 'that way' - Teeter 1964:107-108), w‡tw 'heart', F iŝite:he:wa 'she thinks thus' (iŝi- 'thus, that way'), PA *-te:hi 'heart' A823, #112]. That is, perhaps *-te:h-e:lem ——> Mc -te:l'm.

A sequence of sonorant plus short weak vowel (plus nasal) drop in Micmac before a homorganic obstruent, as in Mc -te:t'm above, but this does not cause lengthening of the preceding vowel: Mc alamk 'I look around for her', alapt'm 'I look around for it' [from PAc *a:wal- 'around' #56, PA *-a:pam and *-a:pantam (reconstructed without the *am) A47, 49].

5. Possibly what is added here is cognate to PA *-ayaki 'kinds, sorts, ways, places': F nekot(w)ayaki 'one group, set', ni:ŝwayaki 'two kinds', C nistwayak 'in three ways, kinds, places', ne:wayak 'in four ways, fourfold'; F taswayaki 'so many kinds', C tahtwayak 'in so many ways'. A contraction of Proto-Algic *aya to Y o: seems plausible, as this is the established reflex of *a:wa (Proulx 1984:186).

6. In Algonquian, the above is generally replaced with: PA *táhŝi- 'so much, so many' A2014-2015 (Mc ta:s- 'how many?' proves the special stress - elsewhere written L). Compare also Mc te:s- 'that many', with initial change. After this element PA had an optional *-w, doubtless analogical with post-numeral *-w (e.g., *nekwetwa:si '6' A1421).

The Micmac stems, contrasting with the locative relative Mc t'l- and changed et'l- 'where, there', show that the PA stem begins in *t- rather than underlying *(en)t-. However most of the Algonquian languages, whose conjuncts are less prominent than Micmac's, have reshaped their changed conjunct stems to psPA *e:ntahi- A264 by analogy with the locative relative ('where'). Menominee has also analogically created an unchanged counterpart of both (used in prefixed forms), reflecting psPA *antahi-. Cree has generalized a root reflecting psPA *entahi-, e.g., ihtasiw 'she is so many'.

Examples of this element in counting: Mc el‡wik'nek te:sipuna:t 'she's 7 years old' (na:nipuna:t 'she's 5 years old' - and cf. M tahno:konak<sew 'she is so many days old'). In Algonquian, this type of phrase largely replaces the variety in #256 - always, when a classifying medial is involved: Mc asoxom te:soxsiči:k '6 things cylindrical in shape', M no:hekan tahnuapi:k '7 strings' (ni:suapi:k '2 strings').

7. It is not clear what the social or linguistic correlates of such a shift in metaphors may be, but it is clear enough that Iroquoian influence could not have been involved. Neither is it

clear how early the shift in metaphors took place, or even if it dates back to PA. For example, the glosses of Delaware nigani 'before' and Ab nikôniwi 'ahead, before' A1608 could mean that these languages retain the moving time metaphor under Iroquoian influence - assuming 'before' means 'earlier' here - and my sources on Montagnais, Passamaquoddy and Micmac show no signs of either metaphor [glossing their cognates for spacial reference only]. Possibly, the shift in metaphors took place during the first Central-Eastern period, only later spreading to western Cree.

Against this, however, is the fact that Blackfoot has the newer Algonquian pattern: isskóxt- 'the one behind, of long ago' (Taylor 1969:208) from PA *eŝkw- (M eskw- 'last, left over'). The alternate aapatóxt-'the one behind, in the north, the ancient one' and am?sskápuxt- 'the one ahead, in the south' further ties the cardinal directions into this metaphor.

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